

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims 2-9, ADD new claims 10-17, and CANCEL claim 1 without prejudice or disclaimer, in accordance with the following:

1. CANCELLED

2. (CURRENTLY AMENDED) A three-dimensional object display system to display objects in an apparent three-dimensional space display according to object attributes used as criteria to select one or more objects the system comprising:

an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

a three-dimensional space data production unit searching the object data storage unit, calculating coordinate values of a three-dimensional space in which to position each object based on the object attribute values selected from the object attributes of each object according to results of the search of the object data storage unit and producing three-dimensional space data displaying each object according to results of the calculation of the coordinate values for the three-dimensional space The three-dimensional object display system as claimed in claim 1, wherein the three-dimensional space data production unit encloses each of the objects positioned in the apparent three-dimensional space display within a frame of a uniform size and further reduces and or enlarges the frame and the objects enclosed therein depending on a distance of the three-dimensional space from a vantage point outside the three-dimensional space.

3. (CURRENTLY AMENDED) A three-dimensional object display system to display objects in an apparent three-dimensional space display according to object attributes used as criteria to select one or more objects, the system comprising:

an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

a three-dimensional space data production unit searching the object data storage unit,

calculating coordinate values of a three-dimensional space in which to position each object based on the object attribute values selected from the object attributes of each object according to results of the search of the object data storage unit, and producing three-dimensional space data displaying each object according to results of the calculation of the coordinate values for the three-dimensional space. ~~The three-dimensional object display system as claimed in claim 1,~~ wherein the three-dimensional space data production unit disperses the positional coordinates of each object and reduces the display size of each object positioned within the apparent three-dimensional space display in a case in which such preventing object data would otherwise to be displayed in an overlapped state because when the objects have identical or contiguous coordinates and when a distance of the three-dimensional space from a vantage point is within a range.

4. (CURRENTLY AMENDED) A three-dimensional object display system to display objects in an apparent three-dimensional space display according to object attributes used as criteria to select one or more objects, the system comprising:

an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

a three-dimensional space data production unit searching the object data storage unit, calculating coordinate values of a three-dimensional space in which to position each object based on the object attribute values selected from the object attributes of each object according to results of the search of the object data storage unit, and producing three-dimensional space data displaying each object according to results of the calculation of the coordinate values for the three-dimensional space. ~~The three-dimensional object display system as claimed in claim 1,~~ wherein the three-dimensional space data production unit comprises:

a dividing unit that divides dividing the three-dimensional space into movable planes or solid spaces; and a display unit that selects selecting and highlights highlighting object data positioned within the divided planes or solid spaces.

5. (CURRENTLY AMENDED) A three-dimensional object display system, comprising:

a server that provides providing object information, the server comprising:

an object data storage unit that stores storing information corresponding to the

~~plurality of object attributes and to display displaying data for each object;~~₁ and

~~a three-dimensional space data production unit that searches searching the object data storage unit, positions positioning the object data in three-dimensional space by matching values for three types of object attributes selected from among a plurality of the object attributes stored in the object-data storage unit for each object to each of three coordinate axes in three-dimensional space, and displays displaying the object according to a predetermined vantage point; and~~

~~a client terminal that selects selecting an object from the object information provided, the client terminal comprising:~~

~~a notifying unit that selects selecting the object attributes of a displayed object and notifies the server;~~₁

~~a receiving unit that receives receiving the three-dimensional space data produced by the server;~~₁ and

~~a vantage point changing unit that changes changing the vantage point with respect to the displayed three-dimensional space, wherein the server and the client terminal being are connected to the system via a network, and when the vantage point is changed, the three-dimensional space data production unit redraws the object according to the changed vantage point.~~

6. (CURRENTLY AMENDED) A three-dimensional object display method for displaying a plurality of objects in an apparent three-dimensional space display according to a plurality of object attributes used as criteria for selecting to select one or more objects, the method comprising the steps of:

~~searching an object data storage unit that stores storing information corresponding to the plurality of object attributes and to display displaying data for each object; and~~

~~producing three-dimensional space data for positioning to position each object by calculating coordinate values for the three-dimensional space in which to position each object based on the plurality of object attribute values selected from among the object attributes for each object according to results of the search of the object data storage unit so as to display each object according to results of the calculation of the coordinate values for the three-dimensional space;~~

~~wherein each of the objects positioned in the apparent three-dimensional space display is enclosed within a frame of a uniform size and the frame and the objects enclosed therein are~~

reduced or enlarged depending on a distance of the three-dimensional space from a vantage point outside the three-dimensional space.

7. (CURRENTLY AMENDED) A computer-readable medium storing program code ~~for~~causing a computer to display a ~~plurality of~~objects in an apparent three-dimensional space display according to a ~~plurality of~~object attributes used as criteria ~~for selecting~~to select one or more objects, the program comprising:

a first program code unit searching an object data storage unit that stores information corresponding to the ~~plurality of~~object attributes and ~~to display~~displaying data for each object; and

a second program code unit ~~for~~producing three-dimensional space data ~~for positioning~~to position each object by calculating coordinate values for the three-dimensional space based on the ~~plurality of~~object attribute values selected from ~~among~~the object attributes for each object, according to results of the search of the object data storage unit so as to display each object according to results of the calculation of the coordinate values for the three-dimensional space,

wherein the second program code unit encloses each of the objects positioned in the apparent three-dimensional space display within a frame of a uniform size and reduces or enlarges the frame and the objects enclosed therein depending on a distance of the three-dimensional space from a vantage point outside the three-dimensional space.

8. (CURRENTLY AMENDED) A computer-implemented method ~~for~~causing a ~~plurality of~~objects to be displayed in an apparent three-dimensional space display according to a ~~plurality of~~object attributes used as criteria ~~for selecting~~to select one or more objects, the method comprising ~~the steps of~~:

searching an object data storage unit ~~that stores~~storing information corresponding to the ~~plurality of~~object attributes and ~~to display~~displaying data for each object; and

producing three-dimensional space data ~~for positioning~~to position each object by calculating coordinate values for the three-dimensional space in which to position each object based on the ~~plurality of~~object attribute values selected from ~~among~~the object attributes ~~for~~of each object, according to results of the search of the object data storage unit so as to display each object according to results of the calculation of the coordinate values for the three-dimensional space,

wherein each of the objects positioned in the apparent three-dimensional space display

is enclosed within a frame of a uniform size and the frame and the objects enclosed therein are reduced or enlarged depending on a distance of the three-dimensional space from a vantage point outside the three-dimensional space.

9. (CURRENTLY AMENDED) A computer specially configured by executing program code stored on a computer-readable medium for causing a plurality of objects to be displayed in an apparent three-dimensional space display according to a plurality of object attributes used as criteria for selecting to select one or more objects, the program comprising:

a first program code unit searching an object data storage unit that stores storing information corresponding to the plurality of object attributes and to display data for each object; and

a second program code unit for producing three-dimensional space data for positioning to position each object by calculating coordinate values for the three-dimensional space based on the plurality of object attribute values selected from among the object attributes for of each object, according to results of the search of the object data storage unit so as to display each object according to results of the calculation of the coordinate values for the three-dimensional space,

wherein the second program code unit encloses each of the objects positioned in the apparent three-dimensional space display within a frame of a uniform size and reduces or enlarges the frame and the objects enclosed therein depending on a distance of the three-dimensional space from a vantage point outside the three-dimensional space.

10. (NEW) A three-dimensional object display method to display objects in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the method comprising:

searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object;

producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space; and

dispersing positional coordinates of each object positioned within the apparent three-

dimensional space display to reduce a display size of each object to prevent object data to be displayed in an overlapped state,

wherein the objects have identical or contiguous coordinates so that a distance of the three-dimensional space from a vantage point is within a range.

11. (NEW) A three-dimensional object display method to display objects in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the method comprising:

searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space,

wherein the three-dimensional space is divided into movable planes or solid spaces to select and highlight object data positioned within the divided planes or solid spaces.

12. (NEW) A computer-readable medium storing program code for causing a computer to display objects in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the program comprising:

a first program code unit searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

a second program code unit producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space,

wherein the second program code unit disperses positional coordinates of each object positioned within the apparent three-dimensional space display to reduce a display size of each object to prevent object data to be displayed in an overlapped state, and the objects have identical or contiguous coordinates so that a distance of the three-dimensional space from a

vantage point is within a range.

13. (NEW) A computer-readable medium storing program code for causing a computer to display objects in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the program comprising:

a first program code unit searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

a second program code unit producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space, wherein the second program code unit comprises:

program code unit dividing the three-dimensional space into movable planes or solid spaces, and

program code unit selecting and highlighting object data positioned within the divided planes or solid spaces.

14. (NEW) A computer-implemented method causing objects to be displayed in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the method comprising:

searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object;

producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space; and

dispersing positional coordinates of each object positioned within the apparent three-dimensional space display to reduce a display size of each object to prevent object data to be displayed in an overlapped state,

wherein the objects have identical or contiguous coordinates so that a distance of the three-dimensional space from a vantage point is within a range.

15. (NEW) A computer-implemented method causing objects to be displayed in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the method comprising:

searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space,

wherein the three dimensional space is divided into movable planes or solid spaces to select and highlight object data positioned within the divided planes or solid spaces.

16. (NEW) A computer configured by executing program code stored on a computer-readable medium causing objects to be displayed in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the program comprising:

a first program code unit searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

a second program code unit producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space,

wherein the second program code unit disperses positional coordinates of each object positioned within the apparent three-dimensional space display to reduce a display size of each object to prevent object data to be displayed in an overlapped state, and the objects have identical or contiguous coordinates so that a distance of the three-dimensional space from a vantage point is within a range.

17. (NEW) A computer specially configured by executing program code stored on a

computer-readable medium causing objects to be displayed in an apparent three-dimensional space display according to object attributes used as criteria to select at least one object, the program comprising:

a first program code unit searching an object data storage unit storing information corresponding to the object attributes and displaying data for each object; and

a second program code unit producing three-dimensional space data to position each object by calculating coordinate values for a three-dimensional space in which each object is positioned based on object attribute values selected from the object attributes of each object, and based on results of the search of the object data storage unit to display each object according to results of the calculation of the coordinate values for the three-dimensional space, wherein the second program code unit comprises:

program code unit dividing the three-dimensional space into movable planes or solid spaces, and

program code unit selecting and highlighting object data positioned within the divided planes or solid spaces.

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